



UNITED STATES PATENT AND TRADEMARK OFFICE

79
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,052	12/19/2001	Yasumasa Uyama	058856-0109	9811
22428	7590	07/29/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			POLTORAK, PIOTR	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,052

Applicant(s)

UYAMA, YASUMASA

Examiner

Peter Poltorak

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-7 have been examined.

Priority

2. Foreign priority has been claimed in this application.
3. Acknowledgment is made of applicant's claim for foreign priority based on an applications filed in Japan on December 21, 2000 (JPA No. 2000-388921), October 24, 2001 (JPA No. 2001-326908) and December 5, 2001 (JPA No. 2001-370959).

Drawings

4. The drawings are objected to because it is not clear whether differences between enciphering keys in Fig. 17 and 18 are a result of inconsistent representation or whether “-“(dashes) and “”(parenthesis) are special characters that could be used (*these “special characters” are not discussed in the specification*). For example in Fig. 17 (a) enciphering key 1 associated with the destination 0902222... is “a-o-l-so-ra”, wherein the enciphering key with the destination 0903333... is “a”BR”a”EW etc. Compare them with enciphering key 2 Oaufefhgoo... for example.
5. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from

the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claim 1 recites: "a communication function". The term "function" special meaning in the art of computing, and since applicant uses a term "program" in the claim language applicant is advised to replace the term "function" with another term, e.g. operation.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.
8. In claims 1 "the designated transmission destination data" lacks antecedent basis.

Art Unit: 2134

9. Claims 1, 3 and 6-7 are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

10. The following terms are not understood:

- a. Claims 1-3: "a transmission anticipated file",
- b. Claims 1 and 6: "or the like",
- c. Claim 1: "the designated transmission destination data",
- d. Claim 1: "concerned correspondence attached",
- e. Claims 3 and 5: "application order data",
- f. Claims 3 and 6-7: "correspondence set", "set in correspondence",
"set in pre-correspondence" and "set correspondence",
- g. Claim 5: "changed suitably",
- h. Claim 6: "a transmission anticipated voice signal",
- i. Claim 6: "a concerned deciphering program" and "a concerned enciphering program".

11. The phrase: "enciphering a transmission anticipated file according to an enciphering program " in claim 1 is not understood. It is not clear whether it is referring to an enciphering program enciphers a transmission anticipated file or to something else.

12. The term: "prescribed" in "prescribed deciphering instruction" and "prescribed enciphering instruction" (*claim 1*) is not understood.

13. The phrase: "by looking up the reference table using the designated transmission destination data as a key" in claim 1 is not understood. It is not clear whether a comma is missing between the "table" and "using" or whether the data is used as a key for the lookup in the reference table.
Furthermore, it is not clear whether "and being read out from the memory..." is directed to the key, the table or something else. Similar lack of clarity is present in the second paragraph of claim 1 and in claim 3.
14. The term: "application order data" in claims 3 and 5 is not understood.
15. The phrase: "... said reference table is enabled to have a plurality of enciphering programs, or deciphering programs ... and attachment file...separately, for each transmission destination data or transmission source data" in claim 4 is not understood. It is not clear to what "separately" refers to.
16. The phrase: "producing voice of the received voice signal in order using" in claim 6 is not understood.
17. Furthermore, it is not clear if whether the phrase: "pre-set in correspondence with an optional deciphering program" aims to set the limitation that the "pre-set" corresponds to "an optional deciphering program", or whether the limitation could be treated as though the "pre-set" is optional.
18. The claim 6 limitation: "means for enciphering and transmitting a transmission anticipated voice signal using a concerned enciphering program, said enciphering program to be used for the communication being identified based on the transmission destination data regarding the communication, and the

enciphering reference data" is not understood. It is not clear whether the "the enciphering reference data" should be treated as "said enciphering program using enciphering reference data" or "mean for ... using enciphering reference data".

19. The examiner attempted to point out the most baffling language problems that seem to result from an original text translation. However, in the amendment applicant should insure that each of the claim language limitations are clear and conform to current U.S. practice.

20. No new matter is allowed

21. The limitations are treated as best understood.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 1-2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ueno et al.* (U.S. Patent No. 5574785) in view of *Ichikawa et al.* (U.S. Patent No. 6307837).

23. *Ueno et al.* teach an enciphered communication system comprising a transmitter that enciphers data using a table including a plurality of cipher keys (col. 3 line 65 - col. 4 lines 18). This reads on "means for automatically

enciphering a transmission anticipated file according to an enciphering program upon an input of a prescribed enciphering instruction”.

24. *Ueno et al.* teach a receiver with deciphering means that deciphers received data (col. 4 lines 19-20). This reads on means for automatically deciphering a received enciphered file according to a deciphering program upon an input of a prescribed deciphering instruction.

25. *Ueno et al.* do not teach using the designated transmission destination data as a key for looking up the enciphering program in the reference table and do not teach using the transmission source data of a received enciphered file as a key for looking up the enciphering program in the reference table.

26. *Ichikawa et al.* teach using the designated transmission destination data as a key for looking up the enciphering program in the reference table (col. 13 lines 12-23, col. 10 Table 2). Using transmission source data of a received enciphered file as a key for looking up the deciphering program in the reference table is not only an obvious modification for security benefit, but also *Ichikawa et al.* do not prevent data exchange between entities, which reside on the same VLAN; as a result one would expect the data exchange among entities with the same VLAN address.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the designated transmission/destination and source data as a key for looking up the enciphering/deciphering program in the reference table as taught by *Ichikawa et al.* One of ordinary skill in the art

Art Unit: 2134

would have been motivated to perform such a modification in order to increase system's security.

27. As per claim 2 Official Notice is taken that it is old and well-known practice to utilize electronic mail for transmitting files, including the enciphered files attached to an electronic mail. One of ordinary skill in the art at the time of applicant's invention would be motivated to employ *Ueno et al. in view of Ichikawa et al.*'s invention in electronic mail in order to transmit anticipated file attached to an electronic mail, to the designated transmission destination in order to assure mail security.

28. As per claim 6, voice signal e.g. voice print is a file and as a result it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to extend *Ueno et al. in view of Ichikawa et al.*'s. to voice signal. One of ordinary skill in the art would have been motivated to perform such a modification in order to ensure voice signal confidentiality.

29. Claims 3-5, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ueno et al. (U.S. Patent No. 5574785)* in view of *Ichikawa et al. (U.S. Patent No. 6307837)* and in further view of *Menezes et al. (Alfred J. Menezes, Paul C. van Oorschot, Scott A. Vanstone, "Handbook of applied cryptography", 1997, ISBN: 0849385237)*.

30. As per claims 3 and 7 *Ueno et al. in view of Ichikawa et al.* teach the referenced table with a plurality of kinds of enciphering program as discussed above.

31. *Ueno et al.* in view of *Ichikawa et al.* do not teach (as best understood) an application order data corresponding to a single transmission destination data, and the transmission anticipated file with transmission destination data designated and correspondence set, is enciphered in multiple stages using a plurality of kinds of enciphering programs in a sequence based on the application order data.
32. *Menezes* teaches an application order data corresponding to a single transmission destination data, wherein a file is enciphered in multiple stages using a plurality of kinds of enciphering programs in a sequence based on the application order data (*Menezes, 7.30 and Fig. 7.2, pg. 234*).
33. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement employ an application order data corresponding to a single transmission destination data, wherein a file is enciphered in multiple stages using a plurality of kinds of enciphering programs in a sequence based on the application order data as taught by *Menezes*. One of ordinary skill in the art would have been motivated to perform such a modification in order to increase security.
- Deciphering an enciphered file specified by the transmission source data with set correspondence using a plurality of kinds of deciphering programs in a sequence based on the application order data would be implicit.
34. As per claim 4 table as taught by *Ichikawa et al.* comprise a plurality of separate enciphering/deciphering programs corresponding to different destination data or transmission source data. As a result main text of

Art Unit: 2134

electronic mail and attachment files of electronic mail will correspond to separate plurality of enciphering /deciphering programs depending on the electronic mail source/destination.

35. As per claim 5 decryption is an inverse of encryption; as a result an automatic change application order data would have been obvious to one of ordinary skill in the art at the time of applicant's invention for benefit of ease encryption/decryption process.

Also, with the exception of the most primitive tasks, automation requires some pre-set rules.

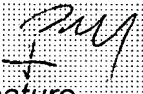
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571)272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.


Art Unit: 2134

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Signature

7/20/05
Date

David Y. Jung
Primary Examiner


7/20/05